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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/688,610	10/13/2000	David H. Donovan	60990005Z26	9946

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HEWLETT-PACKARD COMPANY
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EXAMINER

THOMPSON, JAMES A

ART UNIT PAPER NUMBER

2624

DATE MAILED: 05/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action
Before the Filing of an Appeal Brief**

Application No.

09/688,610

Applicant(s)

DONOVAN ET AL.

Examiner

James A. Thompson

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--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 14 April 2005 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☒ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
(b) ☐ They raise the issue of new matter (see NOTE below);
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
(d) ☒ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: see attached. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): _____.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☒ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
The status of the claim(s) is (or will be) as follows:
Claim(s) allowed: _____.
Claim(s) objected to: _____.
Claim(s) rejected: 1-33.
Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: see attached.
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s). _____.
13. ☐ Other: _____.

Response to Amendment

1. The proposed amendments to the claims will not be entered since the amendments add additional claims without canceling a corresponding number of claims.

Response to Arguments

2. Applicant's arguments filed 14 April 2005 have been fully considered but they are not persuasive.

Regarding page 14, line 5 to page 16, line 17: Examiner has given the example of each one of four printing elements printing one of each of the four color registration marks at specific positions along the printed image (figure 4 of Ohno) as a further example of the fact that Ohno (US Patent 5,813,333) does teach incremental printing. Further elaboration was simply not deemed necessary. Therefore, to elaborate, each printing element produces a registration mark at a specific point in the image data (figure 2; figure 4; and column 7, lines 7-20 of Ohno). The registration marks are therefore themselves printed incrementally. First, a black mark is printed in a specific position. Then, a cyan mark is printed in a specific position. Then, a magenta mark is printed in a specific position. Then, yellow mark is printed in a specific position, thus forming the full set of registration markings. After the marking are formed, the printer checks for registration errors and adjusts the printing accordingly to correct the printing for registration errors (column 6, lines 53-67 of Ohno). Thus, the correction for the printing registration, and thus also for the overall four-color rendering, is performed *as the printing is occurring*. Thus, since both the registration marks themselves are printed incrementally (yellow, then cyan, then magenta, then

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black) and the data processing (e.g. registration correction) occurs *just immediately ahead* of the printing, then the printing elements taught by Ohno are clearly incremental printing elements according to a reasonable definition of "incremental printing", even though such reasonable definition may not exactly match the definition commonly used by Applicant.

Further, Examiner notes that Applicant has not attempted to act as his own lexicographer. Therefore, the broadest reasonable interpretation of the common usage of the term "incremental printing" is applied. While disclosure in a co-owned patent may be used for explanatory purposes, said disclosure does not limit the term "incremental printing" to only the specific definition set forth by Applicant.

Regarding page 16, lines 18-28: While it is true that a simple offset lithographic printing plate system, i.e. one that merely prints with plates or similar means and does not perform any type of computer-controlled correction, would clearly not be considered an incremental printing system, the printing system *specifically taught by Ohno* is an incremental printing system, for the reasons set forth in detail above. Thus, Examiner has not attempted to set forth a line of argument that virtually everything in printing is incremental printing. However, the specific system taught by Ohno can be considered as one of the types of incremental printing systems. Thus, the word "incremental" is clearly not being thrown out of the claim language but has fully considered by Examiner as a limiting feature of the claimed invention.

Regarding page 16, line 30 to page 18, line 11: Incremental printing is not limited merely to small, desktop printing devices. Further, whether or not a printing system is

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generally operated by an untrained user or a trained professional has nothing to do with whether or not said printing system prints incrementally. The printing can occur either automatically or require a certain amount of user interference. The amount of skill required of the operator is simply determined by which particular kind of incremental printing is employed, not the mere fact that said printing is incremental printing.

Regarding page 18, line 13 to page 19, line 11: The section (page 4, line 8 to page 5, line 6) of the previous office action, dated 23 December 2004, quoted by Applicant is incomplete and misleading. Page 4, line 8 to page 5, line 6 of said previous office action is in response to page 3, lines 3-27 of Applicant's previous arguments, dated 18 August 2004. The portion Applicant quotes was in response to Applicant's characterization of figure 2(11) of Ohno as a mere rotary cylinder. Examiner was emphasizing the fact that element 11 of figure 2 of Ohno was a "printing unit" as specifically described by Ohno and not merely the rotary cylinder, said rotary cylinder being simply one of many parts of said printing element. This clarification was clearly not meant to demonstrate that each single printing unit was a multi-element printing array, but that each printing unit was indeed a printing element and not a mere rotary cylinder. The collection of all four printing units comprises the multi-element printing array. Each printing unit is a printing element in and of itself. The four printing units, acting together to print resultant image, forms a multi-element printing array. There is no requirement that an array comprise large numbers of elements. "Multi-element printing array" merely means that at least two printing elements act

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together to print a resultant image. Since, as has been discussed in detail above, the four printing units taught by Ohno (figure 2 ("Yellow", "Magenta", "Cyan", "Black") of Ohno) print incrementally, said four printing units are therefore clearly a "multi-element incremental printing array".

Regarding page 19, lines 13-26: Examiner has clearly not attempted to apply such absurd definitions of the word "element" to the claim language in examining the claims with respect to the prior art, as has been discussed in detail above.

Regarding page 19, line 27 to page 20, line 15: Both in previous office actions and in the arguments given above, Examiner has explained the interpretations Examiner has made of both the claims and the prior art, and how the prior art clearly teaches a reasonable interpretation of the terms used by Applicant in the claim language. Applicant is respectfully reminded that Applicant's specifically intended meaning is not the only basis behind which claim language is interpreted. Examiner is required to give the broadest reasonable interpretation consistent with the specification.

Regarding page 20, line 19 to page 22, line 6: Firstly, the alleged difference in ages between the apparatus taught in the *specification* of the present application and the apparatus taught by Ohno does not have any bearing on the patentability of the present *claims*. Rather, it must be demonstrable that the present claims patentably distinguish over the prior art. Further, the particular amount of time that may be required in the production of a print in the apparatus taught by Ohno is also irrelevant. The recited *claims* must be structurally different than what is taught by the prior art.

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Applicant's repeated arguments regarding the definition of incremental printing, the type of operator involved in incremental printing, and the relationship (or alleged lack thereof) of incremental printing with the teachings of Ohno have already been addressed in detail above. Examiner's response does not therefore need further elucidation here.

Regarding page 22, lines 7-17: The precise corps of people that are involved in the production of the systems and methods recited in the present claims have no bearing on the patentability of the present claims. Rather, it is required that the present claims *as specifically recited* result in a structural difference between the claimed invention and the prior art of record in order to patentably distinguish over the prior art of record.

Further, the specific taxonomy used in international patent classification is also no measure upon which to judge whether one particular application is related to one particular patent. The international classification is simply a useful tool by which both examiners and applicants may search the international patent database. The similarity between one particular application and one particular patent lies solely in an individually assessment of what is disclosed in each. Further, it is relation the prior art has with the *claims* of the application which must be considered in a proper examination.

Additionally, the particular social and collaborative structure that exists among practitioners in the art also is irrelevant with regard to whether or not the present claims patentably distinguish over the prior art. All of the patents and journals are commonly available to practitioners in the art if they choose to read them. Also, it is not true that there

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exist no journals that practitioners of the different specific types printing arts read. One in particular is *IEEE Transactions on Image Processing* which is readily available and addresses, among other topics, digital halftone processing, color reproduction, and printing.

Regarding page 22, line 18 to page 23, line 5: Examiner respectfully submits that merely applying the same processing as *recited in the claims* to a system that is only different in regards to what is specifically taught *in the specification* does not at all require any kind of extraordinary skill. Further, Applicant's contention that one of ordinary skill can only focus very narrowly on the precise problem in front of him not only goes against the commonly accepted understanding of "ordinary skill in the art", but actually renders such a concept meaningless. If one cannot see any relations between different types of printing, and can only see the relations of aspects of a particular project, then all possible combinations of references inherently become uncombinable. Finally, Examiner notes that Applicant is not attempting to argue that Ohno and Takayanagi (US Patent 5,289,210) and/or Ohno and Cobbs (US Patent 5,600,350) are not analogous. Applicant has been attempting to argue that Ohno and *the application* are not analogous. Applicant's arguments therefore do not even address the issue of analogous art as regarding the rejections under 35 USC §103(a).

Regarding page 23, line 6 to page 23, line 20: Again, Applicant is attempting to argue that Ohno and the application are not analogous and thus does not address the issue of analogous art as regarding the rejections under 35 USC §103(a). Further, "image printing and correction" is actually a narrow

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field of endeavor by which practitioners attempt to correct for all the various printing artifacts that occur when one tries to mechanically or electronically reproduce an image. Methods for correcting printing and halftoning problems in one very specific type of image printing and correction are often useful and easily applicable to another very specific type of image printing and correction. Applicant's rhetorical questions are considered unresponsive to Examiner's arguments.

Regarding page 25, line 16 ("(a) 'Image data'") to page 26, line 22: Examiner must respectfully disagree with Applicant's assessment that image data is not required. While it is possible in common lithographic printing to use oils and a brush to form the plates, this is clearly not what is taught or intended by the system of Ohno. Further, the registration marks themselves are image data since they are particularly colored marks placed at specifically controlled positions on the print medium.

Regarding page 26, line 23 to page 27, line 6: Examiner has also cited figure 2 of Ohno as the "means for printing" (page 7, lines 1-3 of said previous office action). Therefore, figure 2 of Ohno is clearly considered a part of the overall apparatus. Figure 1 of Ohno is simply a diagram of the circuit configuration of the apparatus, while figure 2 of Ohno demonstrates more fully the physical and structural aspects of the apparatus (column 4, lines 26-30 of Ohno). Therefore, it is proper to cite that figure 1 is an apparatus for printing.

Regarding page 27, line 8 to page 30, line 15: While it is true that functional language may be given weight with regard to patentability, said functional language must "breathe life" into the claim, not merely recite intended use. It is Examiner's

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position that the preamble does not since the body of claim 1 (for example) is anticipated by Ohno and the preamble of claim 1 merely demonstrates a particular setting in which to apply what has already been taught by the prior art. Additionally, Examiner has shown that the preamble as specifically recited in claim 1 has indeed been anticipated by Ohno.

Further, claims 1-8 are apparatus claims. While features of an apparatus may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function. *In re Schreiber*, 128 F.3d 1473, 1477-78, 44 USPQ2d 1429, 1431-32 (Fed. Cir. 1997) (The absence of a disclosure in a prior art reference relating to function did not defeat the Board's finding of anticipation of claimed apparatus because the limitations at issue were found to be inherent in the prior art reference); see also *In re Swinehart*, 439 F.2d 210, 212-13, 169 USPQ 226, 228-29 (CCPA 1971); *In re Danly*, 263 F.2d 844, 847, 120 USPQ 528, 531 (CCPA 1959). "[A]pparatus claims cover what a device is, not what a device does." *Hewlett-Packard Co. v. Bausch & Lomb Inc.*, 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James A. Thompson whose telephone number is 571-272-7441. The examiner can normally be reached on 8:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David K. Moore can be reached on 571-272-7437. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Art Unit 2624

JAT
02 May 2005



THOMAS R.
~~THOMAS R.~~ LEE
PRIMARY EXAMINER